

84820



2009-2013 CHEVY/GMC 1500 4WD 10" BASIC KIT

C8470-5 Component Box 1

- 1) Rear X Member
- 2) Sway Bar Drop Bracket
- 2) Compression Strut U Brackets
- 2) Offset Compression Strut U Brackets
- 2) Coil Strut Spacers
- 1) Driver Differential Drop

C8470-2 Component Box 2

- 1) Front X Member
- 1) Front Lower X Member
- 2) Compression Strut 32"
- 1) Left A Arm Drop
- 1) Right A Arm Drop
- 1) Steering Heims Support Bracket

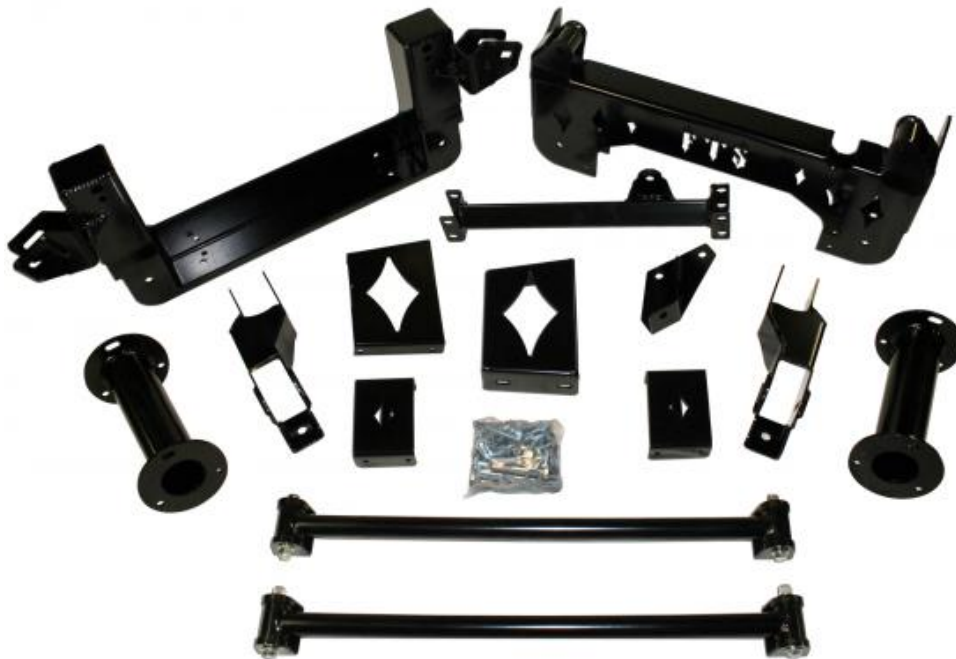
C8470-14 Component Box 3

- 8) Alignment Cams
- 8) Compression Strut Bushing
- 4) Compression Strut Sleeves
- 1) Steering Extension
- 1) Steering U Joint 18mm
- 1) 3/4 Heims Joint
- 2) 3/4 Fine Jam Nuts
- 1) Differential Bushing

- 1) 16mm X 50mm Bolt
- 4) 3/8" X 1 1/2" Bolts
- 4) 3/8" Nylock Nuts
- 8) 3/8" Washers
- 2) 12mm X 25mm Allen

Hardware Bag 1

- 2) 5/8" X 2" Bolts
- 4) 5/8" X 6" Bolts
- 2) 5/8" X 5 1/2" Bolts
- 2) 5/8" X 5" Bolts
- 10) 5/8" Nylock Nuts
- 20) 5/8" Washers
- 2) 1/2" X 2" Bolts
- 8) 1/2" X 1 1/2" Bolts
- 4) 1/2" X 4" Bolts
- 1) 1/2" X 3" Bolt
- 15) 1/2" Nylock Nuts
- 30) 1/2" Washers
- 14) 7/16" X 1 1/2" Bolts
- 14) 7/16" Nylock Nuts
- 28) 7/16" Washers



1) Disconnect the negative terminal on the battery. With the vehicle on level ground and the emergency brake set, block the rear tires. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.

- 2) Remove the nut on the tie rods; disconnect the tie rod ends from the steering knuckle by striking the knuckle to dislodge the tie rod end. Use care not to damage the tie rod end when removing.
- 3) Unplug the ABS brake connection from the frame and control arm. Remove the brake hose bracket from the steering knuckle. Remove the brake hose bracket from the coil bucket and save hardware. Remove the caliper from the rotor and secure the brake caliper to the frame out of the way. **DO NOT ALLOW THE BRAKE CALIPER TO HANG FROM THE BRAKE LINE HOSE.**
- 4) Remove the wheel stud clips and discard. Remove bearing cover, 36mm axle nut, washer, and rotor with hub bearing. (**DO NOT REMOVE THE HUB FROM THE ROTOR**). Retain parts and hardware for reinstallation.
- 5) Remove the upper and lower ball joint nuts. Disconnect the upper and lower ball joints from the steering knuckle by striking the knuckle with a large hammer next to each ball joint on the knuckle to dislodge the ball joints. Use care not to hit the ball joints when removing. Save nuts and discard knuckle.
- 6) Remove the shock assembly and save with the hardware.
- 7) Remove upper a arm and hardware, set aside for reinstallation later
- 8) Disconnect and remove CV axles from differential housing and the sway bar end links and save hardware.
- 9) Remove the lower control arms from the frame and retain with the hardware for reinstallation.
- 10) Remove sway bar.
- 11) Remove front factory differential skid plate and splash shield and discard.
- 12) Disconnect front driveshaft from differential housing and retain bolts and u joint clamps for reinstallation.
- 13) Disconnect the electrical connection including the two retaining clamps and the vacuum line from differential housing. Remove differential housing assembly from vehicle. Retain hardware for reinstallation.
- 14) Carefully cut the metal band clamp holding the rubber boot between the driveshaft and transfer case. Slowly pull the driveshaft from the transfer case and set it aside
- 15) Locate the rear driver lower control arm mount on the frame. Measure 3" from the inside edge of the mount toward the frame and mark with a paint pen. Use a sawzall and cut the mount from the frame.
- 16). Locate the factory front lower control arm pockets. Grind ¼" section from both Corners of the pockets
- 17) Using a cutoff wheel or grinder remove the nub from the left side differential mount as shown in picture #2.
- 18) Cut the front upper a-arm mounts as needed for clearance as shown in picture #3. Preparation is now complete.

INSTALLATION

- 19) Using the factory lower a-arm hardware install the front cross member with the letters facing to the front.
- 20) Install the front lower cross member support using the supplied 7/16" x 1-1/4" bolts, nuts and washers. **DONOT TIGHTEN AT THIS TIME**
- 21) Now install the steering rack assembly on to the front plate using the factory hardware on the right side and

upper left side using the supplied 16mm x 70mm bolt to mount it to the FTS lower cross member.

22) Bend the factory power steering lines as shown in picture #4 and reconnect them to the power steering return hose and factory pressure line. **THE POWER STEERING RETURN LINE IS TO SHORT YOU WILL NEED GET 3/8 POWER STEERING HOSE. THIS IS LOW PRESSURE HOSE.**

23) Install the steering shaft support bracket using the supplied 5/8" x 5-1/2" bolts through the factory left side steering rack mounting holes as well as the heims joint and steering shaft extension as shown in pictures #5A and #5B.

24) Install the right differential drop bracket using the factory hardware at the top and the supplied 1/2 x 3" bolt through the supplied poly bushing. The left side differential drop bracket is installed using the factory bolt in the front and supplied 12mm x 25mm bolt in the rear. **THE NUB ON THE FACTORY DRIVER DIFFERENTIAL DROP WILL NEED TO BE GROUND FLAT**

25) Now carefully lift the front differential into place and secure it using the supplied 5/8 x 2 bolts on the right side and 1/2 x 1-1/2 bolts on the left side

26) Connect the vent tube to the differential by pulling excess line from the frame. Do the same with the differential disconnect switch.

27) Install the rear lower cross member using the factory hardware.

28) Using the supplied 1/2 x 4" bolt and supplied sleeve at the top install the upper a-arm drop now. Secure the bottom of the drop using the supplied 1/2 x 1-1/2 bolt.

29) Install the strut spacer using the supplied 7/16 x 1-1/4 bolts.

30) Install the lower a-arms into the using the supplied 5/8 x 5 bolts in the front and 5/8 x 6 bolts in the rear.

31) Reinstall the strut using all factory hardware.

32) Install and torque the six CV axle flange bolts on each side to factory specification using Loctite on the threads use factory hardware.

33) Install the upper a-arm using the factory bolts and nuts, but new alignment washers supplied with the kit.

34) Install the factory steering knuckle and torque ball joints to factory specs.

35) Tighten lower 5/8 a arm bolts to 125 ft-lbs

36) Tighten front lower cross member bolts to 50ft-lbs

36) Reinstall the rotor and hub bearing assembly using the stock hardware and torque flange bolts to 125 ft lbs. Reinstall brake rotor and caliper. Torque caliper bracket bolts to 90 ft lbs.

37) Screw on the CV axle nut and also torque to factory specs. **USE LOCKTITE**

38) Install the sway bar drop brackets using factory hardware at the top. Now flip over the sway bar and reinstall using factory sway bar end links and supplied 3/8 x 1-1/2 bolts.

39) Attach tie rod end to the knuckle with the factory nut and torque to 40ft. lbs.

- 40) Reconnect the factory ABS wiring by pulling excess from the factory wiring harness.
- 41) Following factory torque specs install the new front brake lines at this time. Be sure to use new copper crush washers with the banjo bolt. Bleed brakes as necessary.
- 42) Install the compression strut u-brackets to the rear cross member as shown in picture #6 using supplied 1/2 x 1-1/2 bolts. Press the compression strut bushings MO3852 into the compression struts and hang them from the u-brackets using supplied 1/2 x 4 bolts. Bolt the remaining u-brackets to the opposite end of the compression struts. Swing the compression struts up to the transmission cross member and secure them using the supplied 1/2 x 3 bolts or by welding them to the cross member.
- 43) If your vehicle has auto track your vehicle requires a new CV front drive shaft. Part# 85475
- 44) Install a new CV front drive shaft now, part# 85475
- 45) The front installation is now complete. Check over all of your work and be sure that there is adequate clearance around all steering components and that everything is tight.

REAR SPRING INSTALLATION

- 1) Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
- 2) Remove the wheels and tires.
- 3) Remove the shocks on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.
- 4) Remove rear brake line from the frame to the axle.
- 5) Remount differential vent tube and secure lines. Make sure there is no pinching, stretching or rubbing.
- 6) Support the rear axle with a floor jack and remove the U-bolts on the driver side. Loosen the U-bolts on the passenger side.
- 7) Lower the rear axle and remove the factory block and rear leaf spring from the driver side only at this time.
- 8) Install the FTS spring pack to the hangers using the factory hardware. Do not tighten at this time.
- 9) Raise the axle to the spring and reinstall the factory U-bolts do not torque these bolts at this time.
- 11) Install new FTS steel braided brake line and bleed as necessary
- 12) Install your new shocks part# 132000 or FTS 12" travel shocks and torque this hardware to 60 ft. lbs
- 13) Torque the U-bolts to 100 ft. lbs
- 14) Reinstall the wheels and tires and lower the vehicle to the ground.
- 15) Torque the spring hanger bolts at this time. The 16mm bolts are torqued to 115 ft. lbs. and the 14mm bolts are torqued to 100 ft. lbs. Torque the 14mm or 9/16" U-bolts to 100 ft. lbs.

Product Warranty and Warnings-

FTS provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following FTS items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Take apart shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Lifetime Warranty.

FTS does not warrant any product for finish, alterations, modifications and/or installation contrary to FTS instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping which is considered normal and is not covered under warranty.

FTS products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death.

FTS makes every effort to ensure suspension product compatibility with all vehicles listed in the catalog, but due to unknown auto manufacturers production changes and/or inconsistencies by the auto manufacturer,

FTS cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in FTS catalog are only a guideline for street driving with noted fender trimming. FTS is not responsible for damages to the vehicle's body or tires.

FTS obligation under this warranty is limited to the repair or replacement, at FTS option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. FTS is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed FTS product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by FTS.

FTS suspension components must be installed as a complete system including shocks as shown on our current website. All warranties will become void if FTS parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. FTS does not warrant products not manufactured by FTS.

Installation of FTS product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of FTS products with the consumer prior to purchase. FTS reserves the right to supersede, discontinue, change the design, finish, part number and, or application of parts when deemed necessary without written notice. FTS is not responsible for misprints or typographical errors within the catalog or price sheet.

Thank You for choosing Full Throttle Suspension

Tech support 559-271-8685 or send email to fts.dwgs@gmail.com

STANDARD BOLT TORQUE & IDENTIFICATION					
INCH SYSTEM	METRIC SYSTEM				
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 10.9	Class 12.9
5/16	15 FT-LB	20 FT-LB	M6	9 FT-LB	12 FT-LB
3/8	30 FT-LB	35 FT-LB	M8	23 FT-LB	27 FT-LB
7/16	45 FT-LB	60 FT-LB	M10	45 FT-LB	50 FT-LB
1/2	65 FT-LB	90 FT-LB	M12	75 FT-LB	90 FT-LB
9/16	95 FT-LB	130 FT-LB	M14	120 FT-LB	145 FT-LB
5/8	135 FT-LB	175 FT-LB	M16	165 FT-LB	210 FT-LB
3/4	185 FT-LB	280 FT-LB	M18	240 FT-LB	290 FT-LB

